

COMMUNICATIONS: Direct Digital Synthesis

32 BIT DDS																		
DDS FUNCTIONS																		
		Power Supply							SFDR	SFDR	SFDR					Model Designator		
		Requirements		Output	Update	SNR		THD	Narrow	Narrow	Wide	INL	DNL	Voltage	Temp			
	#	+Vcc	+Icc	Current	Rate	@ Fmax	@ Fout		Band 50KHZ	Band 200KHZ	Band 2MHZ	Lsb's	Lsb's	Reference	Range	#	Price	
MODEL	Bits	+ Volts	+ mA	mA	MSPS	dB	MHz	-dB	CLK=6.2MHZ	CLK=6.2MHZ	CLK=6.2MHZ	+25C	+25C	Volts	Volts	0	-40	of
									Fout=2.11MHz	Fout=2.11MHz	Fout=2.11MHz							
AD7008 (Complete 32 bit DDS with Quadrature Modulator)																		
AD7008-20	10	+5V	160	20	20	50	2	55	70	ns	55	±1	±1	1.27		JP	AP	44
AD7008-50	10	+5V	160		50	50	2	53	70	ns	55	±1	±1			JP	AP	44
		Power Supply							SFDR	SFDR	SFDR					Model Designator		
		Requirements		Output	Update	SNR		THD	Narrow	Narrow	Wide	INL	DNL	Voltage	Temp			
	#	+Vcc	+Icc	Current	Rate	@ Fmax	@ Fout		Band 50KHZ	Band 200KHZ	Band 2MHZ	Lsb's	Lsb's	Reference	Range	#	Price	
MODEL	Bits	+ Volts	+ mA	mA	MSPS	dB	MHz	-dB	CLK=6.2MHZ	CLK=6.2MHZ	CLK=6.2MHZ	+25C	+25C	Volts	Volts	0	-40	of
									Fout=2.11MHz	Fout=2.11MHz	Fout=2.11MHz							
AD983x (Complete 32 bit DDS with Frequency and Phase Modulators, Sine Lookup)																		
AD9830	10	+5V	60	20	50	50	2	53	72		68	±1	±0.5	1.21		A	48	\$11.70
AD9831	10	+3V	12	4	25	50	1	55	-70 @±25KHz	-55 @±1MHz	-55 @±1MHz	±1	±1	1.21		A	48	\$7.35
AD9832	10	+3V	12	4	25	50	1	55	-70 @±25KHz	-55 @±1MHz	-55 @±1MHz	±1	±1	1.21		A	16	\$7.35
AD9835	10	+5V	40	4	50	50	1	53	-72 @±50KHz		-50 @±2MHz	±1	±1	1.16		A	16	
		Power Supply							SFDR	SFDR	SFDR					Model Designator		
		Requirements		Output	Update	SNR		THD	Narrow	Narrow	Wide	INL	DNL	Voltage	Temp			
	#	+Vcc	+Icc	Current	Rate	@ Fmax	@ Fout		Band 50KHZ	Band 200KHZ	Band 2MHZ	Lsb's	Lsb's	Reference	Range	#	Price	
MODEL	Bits	+ Volts	+ mA	mA	MSPS	dB	MHz	-dB				+25C	+25C	Volts	Volts	0	-40	of
									Fout=40.1MHz	Fout=40.1MHz	Fout=40.1MHz							
DDS/DAC Clock Generator w/On Chip Comparator																		
AD9850	10	+3V	56	20	110	NS			NS	NS	NS	NS	NS	1.21		A	28	\$14.55
AD9850	10	+5V	76	20	125	NS			80	77	46	±1/2	±1/2	1.21		A	28	\$14.55